<center>**REMARKS/ARGUMENTS**</center>

In the Final Office Action mailed on May 4, 2009, claims 1-7, 12-15, 17-20, and 22-23 are rejected. Additionally, claims 1-10, 12-15, 17-19, and 23 are objected to. Additionally, the specification is objected to. In response, Applicant proposes amending claims 1, 4, 6, 9, 10, 13, 20, and 21 and canceling claims 8 and 12. Applicant respectfully requests that the amendments be <u>entered</u> to put the claims in condition for allowance as specified under 37 C.F.R. 1.116(b)(1). Applicant hereby requests reconsideration of the application in view of the proposed amendments and the below-provided remarks.

<u>Allowable Subject Matter</u>

Applicant appreciates the Examiner's review of and determination that claims 8-10 and 21 recite allowable subject matter. In particular, the Office Action stated that claims 8-10 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In response, Applicant proposes amending claim 1 to include the subject matter of claim 8 and amending claim 20 to include the limitation "outputting data representative of said frame format type in the form of a training sequence for an equalizer" of claim 21. Thus, Applicant respectfully asserts that claims 1, 9, 10, and 20 now recite allowable subject matter. As a result of the above-identified amendments to claims 1 and 20, Applicant proposes cancelling claim 8, amending claims 9 and 10 to reflect correct claim dependencies, and amending claim 21 to remove the phrase "outputting data representative of said frame format type in the form of a training sequence for an equalizer" and to recite that "data representative of said frame format type and said training sequence are output substantially simultaneously."

Additionally, Applicant proposes amending claims 1, 4, 6, 10, and 13 and canceling claim 12 to overcome the objections to claims 1-7, 9, 10, 13-15, 17-19, and 23. In particular, Applicant proposes amending claim 1 to recite in part:

"a frame format decoder comprising a counter configured to count a number of consecutive bits of the synchronization field of a frame, wherein the frame format decoder is configured to determine, when N consecutive bits having the same polarity or logic value have been counted by said counter, if said frame format is of said first or second type, depending on the polarity or logic value of said N consecutive bits, where N is an integer greater than 1; and

a training sequence generator configured to output data representative of said frame format type in the form of a training sequence for an equalizer." (emphasis added)

Applicant also proposes amending claim 4 to recite in part that "*the frame format decoder comprises a descrambler to which said data frame is applied, the output of said descrambler being applied to said counter*" (emphasis added), amending claim 6 to recite in part that "*the frame format decoder comprises a demodulator for demodulating the output data from said despreader, prior to the data being provided to said counter*" (emphasis added), and amending claim 10 to recite in part that "*the frame format decoder comprises a descrambler and the training sequence generator comprises a scrambler, a modulator, and a data spreader.*" Additionally, Applicant proposes canceling claim 12 and amending claim 13 to reflect correct claim dependency.

Support for the amendments to claims 1, 4, 6 and 10 is found in Applicant's specification at, for example, original claims 1, 4, 6, and 8-10, Fig. 4, and page 8, lines 8-28. In particular, with reference to Fig. 4 of Applicant's specification, a frame format decoder (22) includes a demodulator (28), a descrambler (30), and a counter (32); and a training sequence generator (24) includes a scrambler (34), a modulator (36), and a spreader (38). Additionally, with reference to Fig. 4 of Applicant's specification, Applicant notes that the frame format decoder (22) does not include the despreader (26). Because the frame format decoder (22) does not include the despreader (26), Applicant respectfully submits that the limitation "*said apparatus comprises a despreader to which said data frame is applied prior to the data being passed to said counter*" as recited in claim 5 is supported in Applicant's specification. Thus, Applicant respectfully asserts that the above-identified claim amendments overcome the objections to claims 1-7, 9, 10, 13-15, 17-19, and 23. As a result, Applicant respectfully requests that the objections to claims 1-7, 9, 10, 13-15, 17-19, and 23 be withdrawn.

As described above, claims 1, 9, 10, and 20 now recite allowable subject matter and the objections to claims 1-7, 9, 10, 13-15, 17-19, and 23 have been overcome.

Claims 2-7, 13-15, 17-19, and 23 depend from and incorporate all of the limitations of amended independent claim 1. Thus, Applicant respectfully asserts that claims 2-7, 13-15, 17-19, and 23 are allowable at least based on an allowable claim 1. Claim 21 and 22 depend from and incorporates all of the limitations of amended independent claim 20. Thus, Applicant respectfully asserts that claim 21 and 22 are allowable at least based on an allowable claim 20. Accordingly, Applicant respectfully asserts that claims 1-7, 9, 10, 13-15, and 17-23 are now in condition for allowance.

Objections to the Specification

     Regarding the Office Action's suggestion to add section headings, Applicant respectfully declines because the indicated suggestions in 37 C.F.R. § 1.77(b) are not statutorily required for filing a non-provisional patent application under 35 USC § 111(a), but per 37 C.F.R. § 1.51(b) are only guidelines that are suggested for Applicant's use. The section headings are not mandatory, and in fact when Rule 77 was amended in 1996 (61 FR 42790, Aug. 19, 1996), Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, stated in the Official Gazette:

     "Section 1.77 is permissive rather than mandatory. … 1.77 merely expresses the Office's preference for the arrangement of the application elements. The Office may advise an applicant that the application does not comply with the format set forth in 1.77, and suggest this format for the applicant's consideration; however, the Office will not require any application to comply with the format set forth in 1.77."

     In view of the above, Applicant prefers not to add section headings.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the proposed amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-4019** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

<div style="margin-left:40%">

Respectfully submitted,

/mark a. wilson/

Mark A. Wilson
Reg. No. 43,994

Wilson & Ham
PMB: 348
2530 Berryessa Road
San Jose, CA 95132
Phone: (925) 249-1300
Fax: (925) 249-0111

</div>

Date: May 21, 2009